

## CHAPTER 2: ALTERNATIVES

### 2.1 INTRODUCTION

This chapter discusses the process used to evaluate and eliminate potential alternatives. Alternatives were developed to address the transportation needs identified in **Chapter 1**. This chapter describes the six alternatives, including the No Build Alternative, and evaluates their responsiveness to purpose and need and other screening criteria.

### 2.2 ALTERNATIVE DEVELOPMENT AND SCREENING PROCESS

A three step process was used to identify and screen project alternatives for the study, as shown in **Figure 2-1**. The first step involved developing alternatives based upon the purpose and need, traffic analysis, and the extensive public input collected from May 2002 to September 2004 as part of the DEIS process.

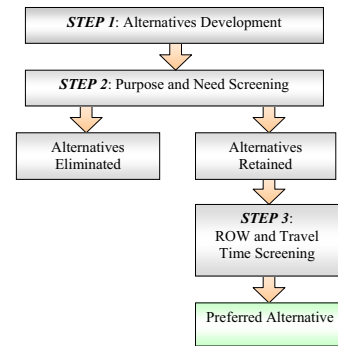
Also, in accordance with the UDOT Environmental Manual and direction from UDOT Region 2, the alternatives development process used the Context Sensitive Solutions (CSS) design approach. CSS balances preservation of the historic, scenic, and natural environments, along with other community values on an equal basis with mobility, safety, and economics. The collaborative efforts of UDOT, UTA, West Valley City, and WFRC helped to identify alternatives and supply pertinent information during the SES process. For instance, UTA and WFRC helped to define the Transit Build Alternative by indicating where exclusive transit-way was planned, and, UDOT indicated that construction of additional lanes would be limited under the I-215 interchange area.

The second step evaluated the ability of each alternative to meet the project's purpose and need, as presented in **Chapter 1**. Alternatives that met a majority of the purpose and need elements were carried forward to the third step.

The third step evaluated the alternatives based on their right-of-way and relocation impacts. Consideration was given to reducing community impacts by selecting the alternatives that minimized the number of residential, commercial, and property acquisitions required (see **Table 2-2**). This step also compared travel times for each alternative as a measure of travel mobility and capacity (see **Table 2-3**).

The improvements planned between 2700 West and Redwood Road (east segment) include the modification of the off-ramp terminals at the I-215 interchange and widening of 3500 South from four lanes to six lanes under I-215 (see **Figure 2-2**). **Figure 2-7** shows the existing three lane cross-section between Decker Lake Drive and Redwood Road, which remains unchanged for all the alternatives.

**Figure 2-1: Alternatives Screening Process**



#### 2.2.1 STEP ONE: Alternatives Developed

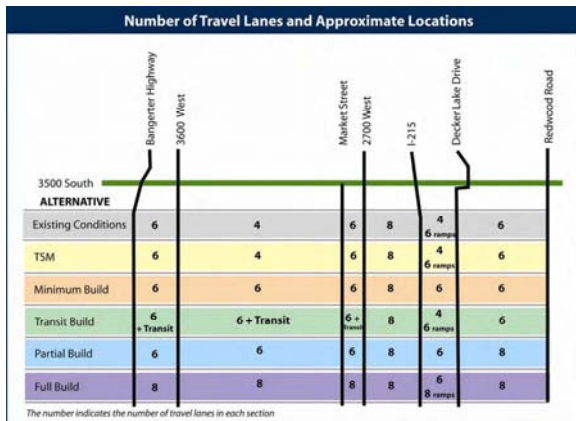
Step one identified the following alternatives that could be designed according to CSS principles and have the potential to meet purpose and need.

- Transportation Systems Management (TSM)
- Minimum Build
- Transit Build
- Partial Build
- Full Build

The biggest differences between these alternatives relates to:

1. The number of proposed lanes (see **Figure 2-2** and **Table 2-1**)
2. The inclusion of dedicated transit right-of-way. Developing lane requirements involved balancing capacity needs with impacts to roadside properties (see **Table 2-2**, page 39).

**Figure 2-2: Number of Travel and Transit Lanes**



#### 2.2.2 STEP TWO: Purpose and Need Screening

Step 2 evaluated the ability of the alternatives to meet each of the identified project needs. **Table 2-1** shows these results.

**Table 2-1: Purpose and Need Screening**

Alternative	Address Roadway Deficiencies	Improve Safety	Address Pedestrian/Bicycle Opportunities	Improve Transit Opportunities	Improve Travel Mobility	Maintain Consistency With Local Land Use Plans	Improve Capacity
No Build	N	N	N	N	N	N	N
TSM	N	N*	N*	N	N*	N	N
Minimum Build	Y	Y	Y	N	Y	N	N*
Transit Build	Y	Y	Y	Y	Y	Y	N*
Partial Build	Y	Y	Y	N	Y	N	Y
Full Build	Y	Y	Y	N	Y	N	Y

\*Alternative may result in modest improvements to this transportation need

##### 2.2.2.1 Alternatives Eliminated

###### TSM Alternative

The TSM Alternative includes a range of activities that would maximize the efficiency of the existing transportation system. TSM strategies are aimed at maximizing the use of the existing corridor without full reconstruction of the roadway. Typical measures include signal coordination, turn lanes, access management, enhanced transit, and improved sidewalks and bicycle trails. These measures are not intended to add capacity, but to optimize the operation of the existing facility and encourage multimodal options. They increase the efficiency by which a facility can carry traffic without increasing the number of through lanes. (It is assumed that the TSM Alternative would not substantially change the existing cross-section of 3500 South, therefore a figure has not been produced.)

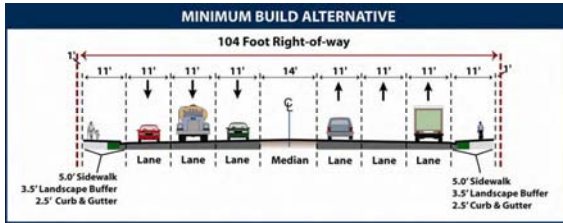
Because it does not reconstruct roadway sections or add capacity, the TSM Alternative would not meet any elements of purpose and need on its own, although it could marginally improve travel mobility, pedestrian/bicycle opportunities and safety conditions. However, because some of the TSM elements could make other Build Alternatives more effective, some were included in the other alternatives: optimized signalization at intersections, improvements for non-motorized travel such as crosswalks and better bus facilities, turn lanes at some locations, and access management strategies for improved safety.

###### Minimum Build Alternative

The Minimum Build Alternative includes a 104-foot cross-section, three 11-foot lanes in each direction, a 14-foot median, and improved sidewalk and landscaping throughout (see **Figure 2-3**). To achieve this, two lanes would be added to the four-lane section between 3600 West

and Market Street, while the section between 2700 West and the I-215 interchange would remain at its current capacity of eight lanes (see **Figure 2-2**). The roadway and alignment improvements in the Minimum Build Alternative require the least amount of additional right-of-way of all of the build alternatives, in part because no shoulders are provided and transit would continue to travel in mixed traffic lanes.

**Figure 2-3: Minimum Build Alternative: Cross-Section**



Despite the minimal right-of-way impacts, the Minimum Build Alternative was eliminated from further consideration because it does not meet the purpose and need for the project. Although the sidewalks included in the design would enhance pedestrian and bicyclist opportunities, the alternative as a whole would only provide modest improvements to travel mobility, roadway deficiencies, and capacity (see **Table 2-1**). This alternative would not accommodate dedicated transit, since planned BRT operations require more right-of-way for exclusive lanes or shoulders to accommodate station areas. In addition, since the Minimum Build Alternative does not accommodate transit, it would not be consistent with local land use plans calling for expanded transit and transit-oriented development.

#### 2.2.2.2 Alternatives Retained

Four alternatives remained after Step 2: the No Build, Transit Build, Partial Build, and Full Build alternatives.

##### No Build Alternative

The No Build Alternative provides a baseline for comparing other alternatives. (The No Build Alternative maintains the existing cross-section of 3500 South, therefore a figure has not been provided.) It includes minor safety and maintenance activities that have already been programmed. These include spot traffic operational improvements within the existing

right-of-way, regular facility maintenance and minor improvements, and pavement resurfacing.

The No Build Alternative would not improve roadway deficiencies, safety, pedestrian/bicycle opportunities, transit opportunities, travel mobility, or capacity. Although it does not meet the purpose and need (as shown in the Step 2 screening), the No Build Alternative was carried forward to serve as a baseline.

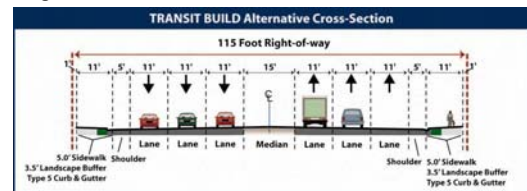
##### Transit Build Alternative

The Transit Build Alternative would improve roadway deficiencies, safety, pedestrian and bicyclist opportunities, transit opportunities, and travel mobility. However, similar to the Minimum Build Alternative, it would only marginally improve capacity. Although it does not meet all of the study needs, it performed better than other alternatives developed since it met every need but one. Therefore, it was retained for further study. TSM elements specific to this alternative include transit signal priority, dedicated bus lanes, and enhanced bus stops (see **Figure 2-11** through **Figure 2-13** at the end of the chapter).

##### • Bangerter Highway to 2700 West (West Segment)

The Transit Build Alternative provides enough roadway width to accommodate any of the three cross-sections shown in **Figures 2-4, 2-5** and **2-6**. The proposed right-of-way width for the west segment is 115 feet and includes sidewalks and two feet of right-of-way buffer, one foot on either side. This right-of-way width will accommodate future transit. As shown in **Figure 2-2**, the number of travel lanes would remain the same as existing conditions, except for the section between 3600 West and Market Street which would be widened from four lanes to six lanes. **Figure 2-4** shows the proposed cross-section if BRT is not incorporated at the time of initial build.

**Figures 2-4 Transit Build Alternative: West Cross-Sections**

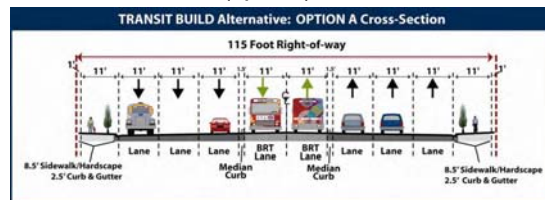


**Figures 2-5 (Option A)** and **Figure 2-6 (Option B)** show cross-sections that incorporate BRT. Two options, A and B, exist for placement of the BRT lanes. These lanes could be placed in either the median (Option A) or outside of the travel lanes (Option B), as shown below. Right-of-way requirements remain the same for both options. Station platforms will be placed at regular intervals along the transit corridor to provide access to the transit system. The station platform locations will require additional right-of-way width beyond the 115 feet discussed above.

For Option A, the center BRT lanes would be flanked by 1.5 foot curbs separating them from the general traffic lanes. Station platforms would be located in the center of the roadway. At 3600 West, Option A includes two design concepts that require a wider right-of-way:

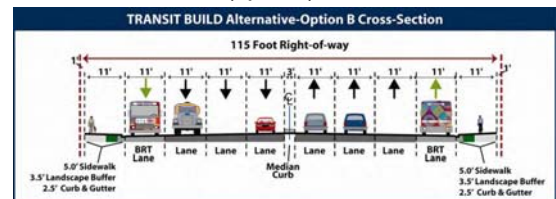
- A 133 foot wide intersection with a separate left turn lane; or
- A 122 foot wide intersection with shared BRT and vehicle left turn lane. Left-turning traffic would be more restricted in this alternative, since turning movements would be less frequent and would take place at controlled intersections.

**Figures 2-5 Transit Build Alternative: West Cross-Sections (Option A)**



Option B provides BRT lanes along the outside of the roadway instead of center-running BRT lanes. Station platforms would be located along the outside of the roadway. Although any build alternative likely would incorporate access management measures, the outside BRT lanes associated with Option B would increase conflicts with the numerous driveways along 3500 South. These conflicts present safety and operational problems for both buses and automobiles. Right-turn movements at intersections could also present safety and operational issues. Option A would avoid many of these conflicts.

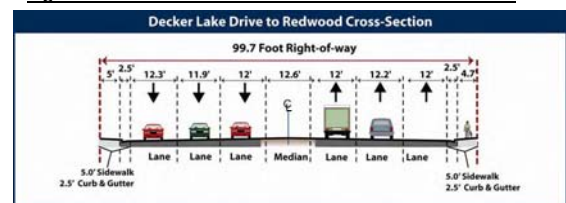
**Figure 2-6: Transit Build Alternative: East Cross-Section (Option B)**



##### • 2700 West to Redwood Road (East Segment)

UTA has no immediate plans for dedicated lane BRT service on 3500 South from 2700 West to Redwood Road, nor does the WFRC Long Range Plan include exclusive right-of-way transit on this segment of 3500 South. Therefore, the need to accommodate exclusive right-of-way transit only applies to the west segment. However, BRT service will be present in this segment as detailed in Related Actions, **Section 2.4.2** under the 3500 South BRT demonstration project. As indicated in **Figure 2-2**, the number of lanes varies by location. Refer to **Figure 2-7** for east segment cross-section.

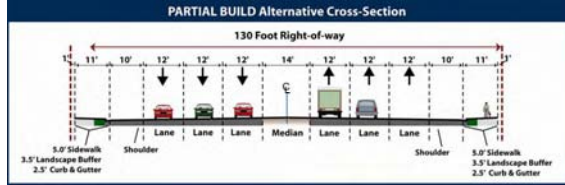
**Figures 2-7 Transit Build Alternative: East Cross-Sections**



### Partial Build Alternative

As shown in **Figure 2-8**, the Partial Build Alternative would add some capacity to 3500 South. Specifically, it would upgrade the section between 3600 West and Market Street from four lanes to six. Also, the section between Decker Lake Drive and Redwood Road would be upgraded from six to eight lanes (see **Figure 2-2**). Unlike the Minimum Build and Transit Build alternative, the Partial Build Alternative includes consistent 10-foot-wide shoulders to enhance roadway safety. It also includes a 14-foot-wide median and two feet of right-of-way buffer, one foot on either side.

**Figure 2-8: Partial Build Alternative: Cross-Section**



The Partial Build Alternative would increase impacts to properties fronting the corridor. Improvements would be made to the pedestrian facilities with continuous 5-foot sidewalks and a landscaped area between the sidewalk and the roadway. New curb and gutter would also be added. Improvements would also be made to improve residential and business access through design and realignment of the corridor.

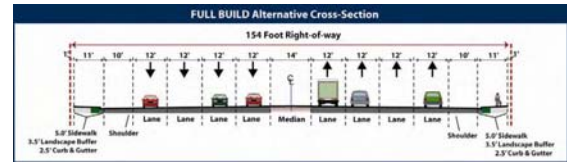
The Partial Build Alternative would improve roadway deficiencies, pedestrian and bicyclist opportunities, travel mobility, and add some capacity. It would provide shoulders and 12-foot traffic lanes instead of the 11-foot lanes proposed in the previous alternatives—features intended to improve safety. It does not include dedicated transit right-of-way and therefore, would not meet that need. It would not be consistent with local land use plans calling for expanded transit and transit-oriented development (see **Figure 2-14** through **Figure 2-16** at the end of the chapter).

### Full Build Alternative

The Full Build Alternative was developed to meet the capacity needs and travel demand discussed in **Chapter 1**. Meeting these needs would require an eight-lane highway. It is

similar to the Partial Build Alternative but would have two additional lanes (one in each direction) between Bangerter Highway and 2700 West (see **Figure 2-9**). It would provide shoulders and wider, 12-foot, traffic lanes.

**Figure 2-9: Full Build Alternative Cross-Section**



The Full Build Alternative would improve roadway deficiencies, pedestrian and bicyclist opportunities, safety, travel mobility, and capacity. Similar to the Partial Build Alternative, it does not include dedicated transit right-of-way and therefore would not meet that need. Also, it would not be consistent with local land use plans calling for expanded transit and transit-oriented development (see **Figure 2-17** through **Figure 2-21** at the end of the chapter).

### 2.2.3 STEP THREE: Right-of-Way and Travel Time Screening

Step 3 assessed the number of residences, businesses, and properties impacted by each of the alternatives retained for further study as well as their estimated travel time. This involved more detailed design and travel forecasting than required for the previous steps. Specifically, preliminary designs were prepared for each of the three retained alternatives that involved widening to the south, widening to the north, or widening out from the center. (See **Figure 2-11** through **Figure 2-21** for property impacts and relocations for each of the build alternatives.)

**Table 2-2** lists property impacts as well as residential and business relocations by each alternative carried forward. For purposes of this study, UDOT assumed the following property impact guidelines:

- Residential property acquisitions that require a new highway right-of-way line within 15 feet of the residential building require the complete acquisition of the property and the relocation.
- Commercial property acquisitions that require a new highway right-of-way line within 5 feet of the building require the complete acquisition of the property and the relocation.

Other factors unique to each particular business and building will result in some variations from these guidelines. For example, if a business operation can tolerate the right-of-way line proximity without hindering business operations, then different measures will be taken with regards to the acquisition of the property. Final negotiations for each acquisition will determine the eventual disposition of each identified impacted property.

**Table 2-2: Right-of-Way Screening**

Alternative	Potential Business Impacts	Potential Residential Impacts	TOTAL	Potential Business Relocation	Potential Residential Relocation	TOTAL
<b>TRANSIT BUILD</b>						
Widen from CENTER	82,000 sq.ft.	0 sq.ft.	82,000 sq.ft.	21	2	23
Widen to the NORTH	80,000 sq.ft.	0 sq.ft.	80,000 sq.ft.	30	2	32
Widen to the SOUTH	53,000 sq.ft.	0 sq.ft.	53,000 sq.ft.	26	2	26
<b>PARTIAL BUILD</b>						
Widen from CENTER	109,000 sq.ft.	0 sq.ft.	109,000 sq.ft.	33	2	35
Widen to the NORTH	105,000 sq.ft.	0 sq.ft.	105,000 sq.ft.	31	2	33
Widen to the SOUTH	69,000 sq.ft.	0 sq.ft.	69,000 sq.ft.	29	2	31
<b>FULL BUILD</b>						
Widen from CENTER	84,000 sq.ft.	0 sq.ft.	84,000 sq.ft.	59	2	61
Widen to the NORTH	143,000 sq.ft.	0 sq.ft.	143,000 sq.ft.	32	2	34
Widen to the SOUTH	93,000 sq.ft.	0 sq.ft.	93,000 sq.ft.	31	2	33

Note: Impacts represent approximate right-of-way square footage needed not complete relocations

The table shows that the Transit Build Alternative would result in the fewest number of relocations since it would require less right-of-way than the Partial and Full Build Alternatives (see **Figure 2-11** through **Figure 2-21**). Due to the commercial nature of the study corridor, most of the relocations would be businesses rather than residences. The 130 foot right-of-way required for the Partial Build Alternative would impact a greater number of businesses than the Transit Build Alternative. Those impacts would increase even further for the Full Build Alternative.

### Travel Time

Step 3 compared travel times for each alternative as a measure of travel mobility and capacity. **Table 2-3** shows forecasted travel times for the Design Year 2030 for each retained alternative. For comparative purposes, travel times for existing and No Build conditions were included.

**Table 2-3: Year 2030 Travel Times**

Alternative	P.M. Peak Hour Travel Time*	
	Eastbound	Westbound
2005 Existing Conditions	8 mins.	12 mins.
2030 No Build	19 mins.	>28 mins.
2030 Transit Build	13 mins.	14 mins.
2030 Partial Build	14 mins.	14 mins.
2030 Full Build	12 mins.	12 mins.

\* Travel time measured between center of Bangerter Highway and Redwood Road intersections

The Transit Build, Partial Build, and Full Build alternatives would improve travel times considerably over the No Build Alternative. East and westbound travel times for these three retained alternatives are similar.

### 2.3 PREFERRED ALTERNATIVE

The selection of a Preferred Alternative is an iterative process. The initial set of alternatives was screened based on whether they would meet purpose and need for the project, resulting in a shortlist of alternatives for further evaluation. The shortlist of alternatives was then evaluated in terms of community impacts (right-of-way) and operational characteristics (travel time).

Selecting a Preferred Alternative balanced each alternative's ability to meet transportation needs against the community impact and disruption it would cause. Due to the excessive right-of-way requirements and relocations, the Partial Build and Full Build alternatives were eliminated.

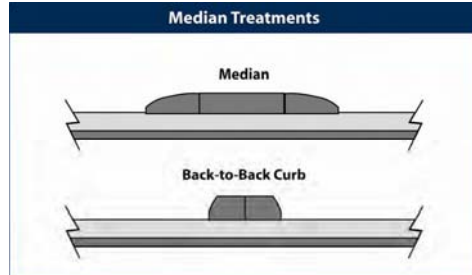
Using this system of elimination, the Preferred Alternative is the Transit Build Alternative. This alternative would meet most of the project needs while minimizing community impacts. To further reduce right-of-way impacts, Design Option A (see **Figure 2-5**) was selected and additional avoidance and mitigation measures were incorporated into the alternative such as merging aspects of the center and south alignments to minimize impacts. Relocations for the center and south alignments for the Transit Build Alternative totaled 23 and 26, respectively. This merged alignment reduced total relocations to 18 (16 business and 2 residential relocations). See **Figure 2-20** through **Figure 2-21**.



### 2.3.1 Design Features

Various design features will be addressed as the Preferred Alternative evolves. One such issue relates to the configuration of median treatments - the area that separates the traffic traveling in opposite directions. The majority of the median treatment along the 3500 South corridor is currently a two-way left-turn lane (TWLTL). Other treatments include medians, and back-to-back raised curb (see **Figure 2-10**). The medians and back-to-back raised curbs prohibit left turns.

**Figure 2-10 Median Treatments**



Medians or back-to-back raised curb currently exist in the following locations:

- From Market Street to 2700 West;
- From 2700 West to I-215 Southbound ramps;
- From I-215 Southbound ramps to Decker Lake Drive; and
- For approximately 250 feet west of Redwood Road.

The back-to-back raised curbs between Market Street and 2700 West and on the west leg of the Redwood Road intersection physically delineate the left turn pockets for these roads. 3500 South between 2700 West and Decker Lake Drive has no-access lines to prevent any property access (on the north and south side of 3500 South) along this section of road, which serves to protect the operation of the I-215 Interchange. The median opening at the I-215 Southbound signalized intersection ramps allow vehicles to turn left (eastbound) onto 3500 South. The back-to-back curb or full median treatments along 3500 South, listed above, eliminate the possibility of vehicles turning left into and out of business driveways.

The Preferred Alternative (Transit Build Alternative, Design Option A) will construct a Bus Rapid Transit lane in the median between Bangerter Highway and 2700 West. Elements of this BRT alternative include, 1.5-foot curbs separating them from the general traffic lanes. These raised curbs will function the same way as back-to-back curbs, preventing left turns along the majority of the 3500 South corridor, except at major intersections. The Preferred Alternative will not change any of the existing access control measures between Market Street and Decker Lake Drive. During the design refinement process, the team will further evaluate the preferred type of median treatment between Decker Lake Drive and Redwood Road, which is currently a TWLTL.

### 2.4 RELATED ACTIONS

Related Actions refers to transportation and development projects that are under study, planned, or under construction in or around the study area. Each of these projects is considered during the SES process to determine the potential impacts and benefits between the various projects and the proposed 3500 South improvements. Related Actions in the 3500 South study area are listed below by the agency that is financially responsible for them in their current phase (study, implementation, or construction).

#### 2.4.1 UDOT

##### Continuous Flow Intersection (CFI)

The CFI is located at the intersection of Bangerter Highway and 3500 South, the western terminus of the 3500 South study area. The CFI will realign lanes on Bangerter Highway and coordinate signal timings to decrease delay for all directions of travel. Construction is scheduled to begin in spring of 2007.

##### SR-201

SR-201 is an east-west (highway/freeway) at approximately 2100 South, two miles north of the 3500 South corridor. Although no part of SR-201 exists within the 3500 South study area, it is an important collector and distributor of traffic in West Valley City, specifically via the 3500 South corridor. Reconstruction and widening of the facility will be completed in fall of 2006.

##### Redwood Road Reconstruction (2320 South to 3100 South)

This project is expected to begin in February 2006. Improvements are focused on safety and capacity improvements and include widening in some areas to make Redwood Road three lanes in each direction with a center turn lane and 4-foot sidewalks throughout the project area. Redwood Road at 3500 South currently matches the planned cross-section.

#### Redwood Road Reconstruction (3500 South to 6400 South)

Construction to remove the current roadway surface on Redwood Road between 3500 and 5400 South and replace it with new asphalt will begin in Spring 2006. Intersection improvements at some locations are also included with this project.

### 2.4.2 UTA

#### 3500 South BRT

UTA will introduce BRT on 3500 South during summer 2007 as a demonstration project. Initially the service will include new vehicles and stations with additional station amenities on 3500 South between the 3300 South TRAX station and 8400 West. Vehicles will share outside lanes with general traffic, although a permanent service could be constructed in place of the planned light rail service identified in the LRP. A permanent BRT service would run in dedicated travel lanes for most, or all of its, route.

#### West Valley Light Rail Transit (LRT) Line

This project will construct a new light rail extension from the existing north-south light rail line in Salt Lake City. It will run between the 2100 South TRAX station and the planned West Valley City Intermodal Center near 2700 West and 3500 South. This will be the first rail service in the city. It is anticipated to be an important connection to north, south, and east trains serving the Wasatch area, to other local buses, and eventually to Commuter Rail. Pending an approved environmental study, construction on the West Valley City light rail line could begin as early as 2012.

#### 3500 South LRT Line

The Long Range Plan (LRP) identifies light rail transit on 3500 South between the planned West Valley City Intermodal Center and 8400 West in the Magna area of Salt Lake County. The 3500 South LRT line is included as part of the Phase 2 (2013 to 2022) LRP Transit Plan. Although currently in the Long Range Plan, this LRT project could potentially be changed to a BRT project in future LRP updates, depending on funding availability. If BRT were to be constructed on 3500 South in place of LRT, the transit-service could be replaced by LRT at a future date when more funds are available.

### 2.4.3 West Valley City

#### 1200 West

A new north-south road will be constructed at 1200 West from 3100 South to 3500 South. In addition to providing a new access for local area residents and businesses, 1200 West is expected to give some relief to 3500 South during activities and events at the E-Center and

surrounding venues. It is currently funded for the year 2010 as a Surface Transportation Project (STP).

#### 2700 West

The West Valley City Capital Improvement Plan (CIP) identifies a widening project for 2700 West between 2400 South and 3500 South. This widening will address safety and congestion issues as well as prepare for the planned West Valley light rail extension. Construction is scheduled to begin by 2010.

#### 3200 West

The West Valley City CIP identifies 3200 West expanding to 3 lanes between 3500 South and 4100 South. This project will add a center-turn lane for the length between the project boundaries in addition to one travel lane in each direction. Construction is scheduled to begin between 2011 and 2015.

#### West Valley City Intermodal Transportation Center

West Valley City completed an environmental assessment in 2000 to site a new intermodal transportation center on the east side of 2700 West, adjacent to Valley Fair Mall. It is currently in the process of a new study that would move the location of the intermodal center to a more centralized location in the City Center redevelopment area near City Hall. The center will be used as a hub for all transit routes serving the city. A construction date has not yet been set for this project.

#### West Valley City Center Redevelopment Area (RDA)

West Valley City has designated a redevelopment area near its City Hall to foster a greater civic and community atmosphere, and in anticipation of the new West Valley City Intermodal Center. The RDA district has been defined and plans are under review for new developments and design characteristics that have been outlined in a City Center Vision plan. 3500 South is included in the RDA area between the I-215 Interchange and approximately 3200 West.

#### West Valley City General Plan: Vision 2020 Long Range Bike Plan

The West Valley City General Plan considers future plans for pedestrian trails and bike lanes. The Long Range Bike Plan includes a Class 1 bike lane in the study area on 3500 South between 2700 West and Redwood Road. This bike lane would likely be constructed in coordination with new development in the area and could be built as a pedestrian trail used jointly by bicycle and pedestrian traffic. If future development plans allow, the bike facility could be upgraded and designated for use by bicycles only and would be in addition to sidewalk areas used by pedestrians.









Figure 2-46: Partial Build Widen to the SOUTH Alternative: section 1



Figure 2-45: Partial Build Widen from CENTER Alternative: section 1

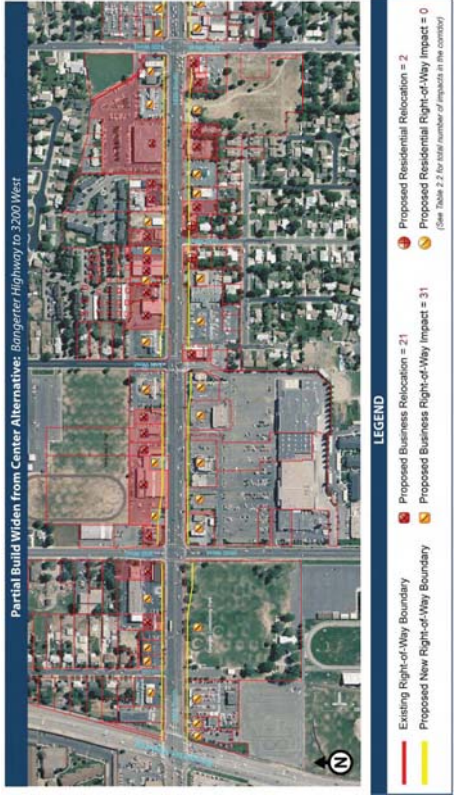


Figure 2-46: Partial Build Widen to the SOUTH Alternative: section 2

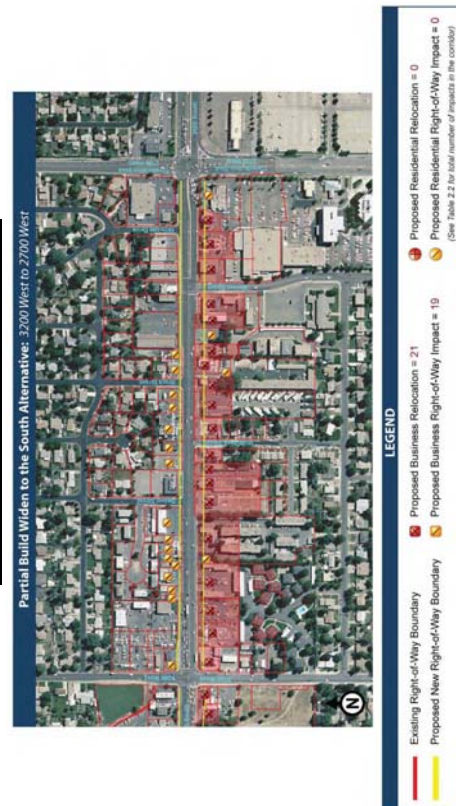
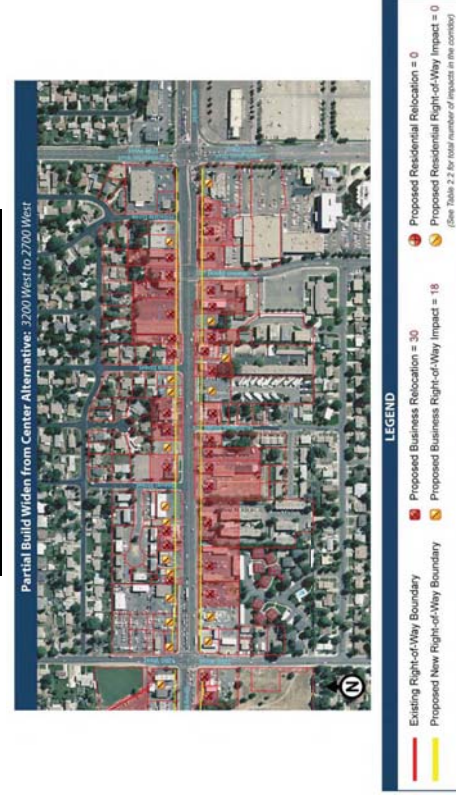


Figure 2-45: Partial Build Widen from CENTER Alternative: section 2



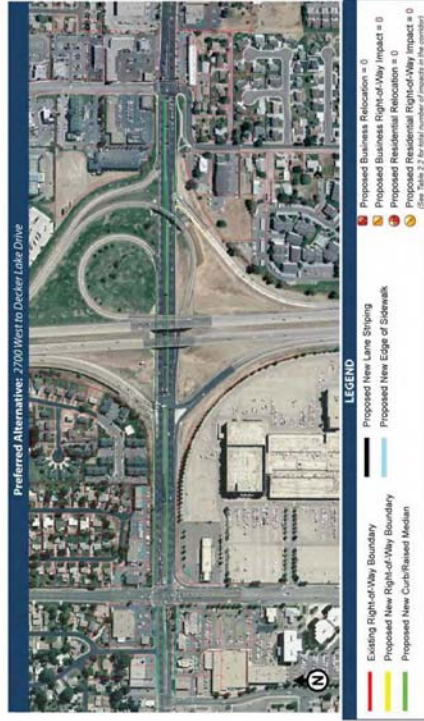








**Figure 2-21: 2700 West to Redwood Road, section 1**



**Figure 2-21: 2700 West to Redwood Road, section 2**

